

in which

P is a partner of a high affinity binding pair,

I is an inert biomolecule,

r is a number from 1 to 10,

AO is a (C₂-C₃)-alkylene oxide group,

n is a number from 5 to 500

I is an end group selected from OH, (C₁-C₄) alkoxy and (C₁-C₄) acyl and

m is a number from 1 to 10;

said method comprising the steps:

(a) preparing a solid phase on which (a solid phase reactant and said
conjugate are immobilized;

(b) incubating the sample with the solid phase and a test reagent; and

(c) detecting the presence or/and the amount of analyte in the sample.

Please add new claims 42-50 as follows.

Claim 42. Use of a modified solid phase reactant which is coupled to a poly(C₂-C₃)-alkylene oxide for reducing the unspecific binding to a solid phase in a method for the detection of an analyte, said method comprising the steps:

(a) providing a solid phase having immobilized thereto said modified solid phase reactant which is coupled to said poly(C₂-C₃)-alkylene oxide;

(b) incubating the sample with the solid phase and a test reagent; and

(c) detecting the presence or/and the amount of analyte in the sample.

⁴⁴
Claim 43. Use as claimed in claim 42, wherein a modified universal solid phase reactant is immobilized on the modified solid phase.

⁴⁵
Claim 44. Use as claimed in claim 42, wherein a modified analyte-specific solid phase reactant is immobilized on the solid phase.

⁴⁶
Claim 45. Use as claimed in claim 43 wherein the universal modified solid phase reactant is a partner of a high affinity binding pair or a conjugate of an analyte-unspecific biomolecule with a partner of a high affinity binding pair.

⁴⁷
Claim 46. Use as claimed in claim 45, wherein the universal modified phase reactant is selected from the group comprising streptavidin, avidin, hapten-specific antibodies, lectins and polymeric conjugates thereof.

⁴⁸
Claim 47. Use as claimed in claim 45, wherein the universal modified solid phase reactant is selected from the group comprising conjugates of inert polypeptides or polysaccharides coupled to biotin, biotin derivatives, haptens or sugars.

⁴⁹
Claim 48. Use as claimed in claim 44, wherein the analyte-specific modified solid phase reactant is a conjugate with a partner of a high affinity binding pair.